2004- 1970

2006

[illegible]

[illegible]

[illegible]

[illegible]	[illegible]	[illegible]
10	[illegible]	1
13	[illegible]	2

2004-1970

2004- 1970

جامعة مؤته، 2006

(2004 – 1970)

Abstract

Impact of Investing in Human Capital on the Economic Development in Jordan during years 1970 - 2004

Mohammad Abdalaziz Al-Adhailih

Mu'tah University ,2006

Among several Economic activities, investing in the human capital has a great importance since it represents the effective and active element in achieving the economic development, taking into account that any initial increment in income by investment will increase a cumulative multiple.

Investing in education, especially the higher is not a matter of Luxury or wasted expenses, but it is one of the best and more attractive investment form than investing in material capital . In developing countries, investment in the human capital is considered one of the pilot projects because any enhancement of human resources by education will therefore affect positively the productive efficiency and support the optimal utilization of resources , hence increasing the domestic product and achieving economic development .

This study aims at defining the framework of expenditure on higher education in Jordan throughout the period 1970 - 2004 , showing the impact of expansion in the number of registered students in all stages of higher education, namely from intermediate community colleges to doctoral programs showing the impact of such expenditure on the economic development The study applied both descriptive and quantitative analysis by using multiple production function (Coop - Douglas) which relates the gross domestic product (GDP) as a dependant variables such as educational inventory expressed by number of registered students at higher level of education, inventory of stable capital, and number of educated people actually

The study revealed the following findings :

1.There is a positive impact for increase of highly educated people on the Gross National Product (GNP)

The study called for several recommendations such as :

1. **Enhancement of the quality labor free through trainers and developing ;**
2. **Increase the spendings on higher education to abolish the effects of unemployment through re-qualification of labor force to work in Jordan and neighboring countries , which means increasing the demand on such labor force.**

[illegible]

[illegible]

1- [illegible]:

[illegible] (1964 [illegible]) [illegible]

[illegible] (1963 [illegible]) [illegible] (1950 [illegible]) [illegible] (1957 [illegible]) [illegible] (1990 [illegible]).

[illegible] (1980 [illegible])

(1992

(1992

4. [illegible]

5. [illegible]

1-3 [illegible]

[illegible]

1-4 [illegible]

[illegible]

1. [illegible]

2. [illegible] 1970 - 2004 [illegible]

3. [illegible]

4. [illegible]
[illegible].

5. [illegible].

1-5 [illegible]:

[illegible] 1970 - 2004 [illegible]

[illegible]:

1. 1970 [illegible] 1967.
2. 1970 - 1982 [illegible].
3. 1983 - 1995 [illegible].
4. 1995 - 2004 [illegible].

1- [illegible] :

1. [illegible].
2. [illegible].

1- [illegible] :

1. [illegible]:(
- [illegible] = y.

(A)

y

$A = \frac{y}{f}$

(y)

($L = \frac{y}{L}$)

K -

L -

Ei -

(1997)

He -

1-8

.1

.2

3. [illegible]
[illegible].

4. [illegible].

1 - [illegible]:

[illegible] :-

1. [illegible] (1970 - 1985).

2. [illegible] (1987 - 2004).

3. [illegible] (1970 - 2004).

4. [illegible] (1970 - 2004).

5. [illegible].

6. [illegible].

7. [illegible].

1 - 10 [illegible]

[illegible]

[illegible]

[illegible]

[illegible] 1 - 2

[illegible]

[illegible]

[illegible]

[illegible]

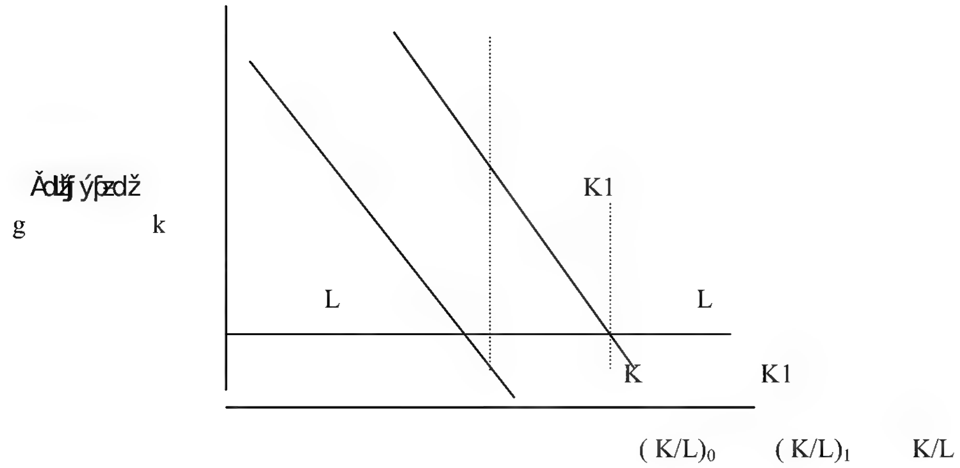
[illegible] (1988

[illegible]

[illegible] (1981 [illegible]

[illegible]

[illegible] (1992 [illegible]).



(1)

Source Ichiro:1989

(Barro,1991)

(1988) (1981)

(Machlup1982)

(199

(Schultz,1980)

1960

(Schultz,1972).

(2)

(LL)

(KK)

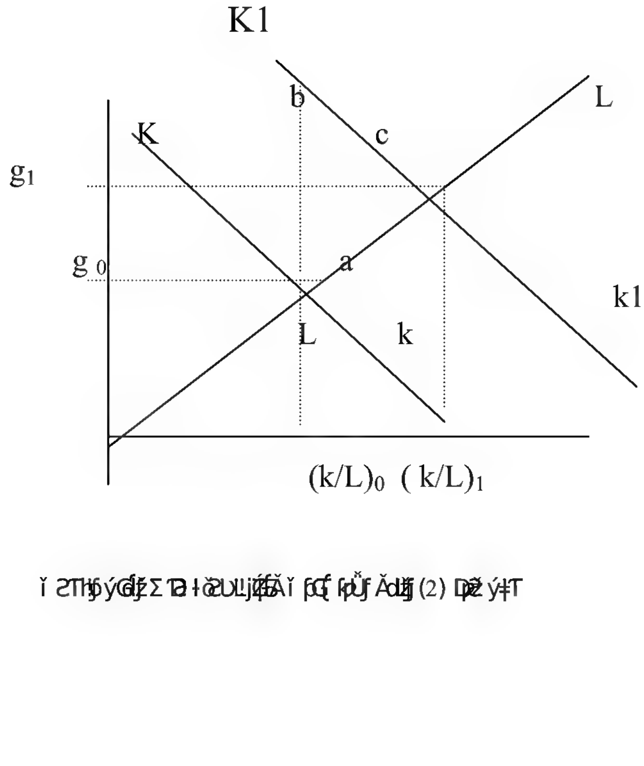
KK)

(c) (K^1K^1)

g

(K^1/L)

. (Icher 1989)



(2)

Source Ichcr:1989

(Backer, .

.1990)

.1

1. [illegible]

2. [illegible]

3. [illegible]

2. [illegible]

[illegible] (1998).

3. [illegible]

[illegible]

1991

45%.

(1996

.4

(Meyer,1977

1976

(Meyer,1977).

2-

(Todaro,Michail,1989)

.1

.2

.3

$$Y = F(L, K, A) \quad .1$$

= Y

= L

= K

= A

[illegible] (1) [illegible]

[illegible]

[illegible]:

[illegible]:

$$Y_t = F(L_t, K_t, A_t) \quad .2$$

[illegible] t = [illegible].

Paul H. Douglas [illegible] (C.W. cobb) [illegible]

[illegible]:

$$Y_t = e^{\phi t} A_t \; L^{B}{}_t K^{Y}{}_t \quad .3$$

[illegible] ø [illegible] α [illegible] B [illegible] Y [illegible]

e = [illegible] (2.71828)

[illegible] (3) [illegible]

[illegible]:

.4

$$\frac{\Delta Y}{Y} = \Phi + \alpha \frac{\Delta A}{A} + \beta \frac{\Delta L}{L} + \gamma \frac{\Delta K}{K}$$

[illegible] Δ = [illegible]

[illegible]

[illegible]

[illegible].

.1 [illegible] **Capital**. [illegible]

[illegible]

[illegible]

[illegible]:

1. [illegible]
2. [illegible]

[illegible]

2. [illegible] : Labor

[illegible]

3. [illegible] :Technical Progress

[illegible]

:Land .4

3- 2

(R.M. Solow, 1957)

1949- 1909

%12.5 %87.5

1959 1959

1955- 1900

(1970) Rosentine Rodan

1964/1963 Martin Carnoy

1963

1962- 1940

(1957- 1929) Schwaltz

Denison)

1960- 1950

1960- 1950 %15

%23

.1960- 1930

(1971) Romes))

(0.5283)

(1980)

.1977- 1960

.(1980

(Mecmahon,1987)

(30)

1985- 1970

(1988)

1985 - 1975

(1990)

(Liue, al) 1993

1985- 1953

(1983)

1983

%20

%13.5 %7

1987

1987/86 1987

(1) [illegible]

[illegible] 2004-1970 [illegible]

([illegible])

[illegible]	[illegible]	[illegible]	[illegible]
30594	1988	2167	1970
34509	1989	2924	1971
32596	1990	3675	1972
31187	1991	4552	1973
32178	1992	5220	1974
33134	1993	6035	1975
42829	1994	7461	1976
45706	1995	7579	1977
48030	1996	9128	1978
47555	1997	14087	1979
69927	1998	17512	1980
74873	1999	20688	1981
78588	2000	19977	1982
78033	2001	23912	1983
90227	2002	18915	1984
97925	2003	22691	1985
106976	2004	22166	1986
		28472	1987

[illegible]:

1. ... 1971-1972 ... 1972

2. ... 1988-1989 ... 1989

3. ... 2004

... 2167 ... 1970 ... 106976 ... 2004 ...

3-2 ...

... (1985 ...

[illegible]

(2) [illegible]

[illegible] 2004 - 1970 [illegible]

[illegible]	[illegible]	[illegible]	[illegible]
5302.67	11489580	2167	1970
4511.02	13190230	2924	1971
3857.10	14174875	3675	1972
3343.02	15217450	4552	1973
3246.29	16945650	5220	1974
3773.16	22771000	6035	1975
3509.98	26188000	7461	1976
4257.35	32266500	7579	1977
4640.42	42357800	9128	1978
3981.11	56082000	14087	1979
3657.62	64367600	17512	1980
3650.70	75525800	20688	1981
5546.25	110797500	19977	1982
4924.09	117745000	23912	1983
6382.47	120724500	18915	1984

5794.45	131482000	22691	1985
6308.08	139825000	22166	1986
4899.27	139492200	28472	1987
4802.39	144523200	30094	1988
4433.56	152998000	34509	1989
5458.41	177922400	32596	1990
5823.90	181630000	31187	1991
6589.08	212023500	32178	1992
7052.93	233692000	33134	1993
8362.07	358139500	42829	1994
6280.14	287040000	45706	1995
6652.14	319502500	48030	1996
7882.86	374869500	47555	1997
5802.95	405783000	69927	1998
5858.67	438656500	74873	1999
7239.29	568921500	78588	2000
7390.52	576705000	78033	2001
6268.00	565542900	90227	2002
6390.55	625794800	97925	2003
6267.64	670505904	106976	2004

[illegible]:

1 - [illegible] (1984-1970)

2 - [illegible] (2004-1984)

3 - [illegible]

[illegible] (2) [illegible]

[illegible]

[illegible]

4-3

(3)

2004 (%8.1) 1970 (%4.9)

(3) [illegible]

[illegible]

[illegible]

[illegible] 2004-1970 [illegible]

[illegible]	[illegible]	[illegible]	[illegible]
4.9	11.5	235.1	1970
5.3	13.2	247.5	1971

4.9	14.2	285.7	1972
4.8	15.2	316.7	1973
4.3	16.9	394.8	1974
5.1	22.8	449.5	1975
4.5	26.2	589.3	1976
4.6	32.3	712.3	1977
5.2	42.4	818.5	1978
5.6	56.1	1009.7	1979
5.3	63.4	1198.7	1980
5.7	85.6	1506.2	1981
6.5	110.8	1714.3	1982
6.4	117.7	1835.8	1983
6.3	120.7	1923.3	1984
6.7	131.5	1965.8	1985
6.3	139.5	2223.2	1986
6.2	139.5	2236.5	1987
6.4	144.5	2261.0	1988
6.3	153.0	2434.0	1989
7.1	177.9	2521.3	1990
6.6	181.6	2739.9	1991
8.8	212.3	2424.3	1992
8.5	233.7	2735.2	1993
6.2	258.1	4206.9	1994
6.2	287.0	4597.9	1995
6.7	319.5	4799.9	1996
7.4	374.9	5090.1	1997
7.3	408.8	5604.0	1998
7.6	438.7	5758.3	1999
7.4	448.4	6084.6	2000
7.4	476.7	6471.7	2001
8.4	565.5	6698.8	2002
8.8	625.8	7143.3	2003
8.1	670.5	8298.7	2004

(2004 – 1970) [illegible]

(2004 – 1970 [illegible]) [illegible]

(2004) [illegible]

[illegible] (3) [illegible]

[illegible]

[illegible] .

[illegible] (4) [illegible]

(4) [illegible]

2004-1970 [illegible]

[illegible]	[illegible]	[illegible]	[illegible]
11489580	5953500	5536080	1970
13190230	6300000	6890230	1971

14174875	7042200	7132675	1972
15217450	8241600	6975850	1973
16945650	9455000	7490650	1974
22771000	10829000	11942000	1975
26188000	11315000	14873000	1976
32266500	13656000	18610500	1977
42357800	16000800	26357000	1978
56082000	20316000	35766000	1979
64367600	24699600	39668000	1980
75525800	24744800	50781000	1981
110797500	49234500	61563000	1982
117145000	73795000	63950000	1983
120724500	55184500	65540000	1984
131482000	61082000	70400000	1985
139825000	62825000	77000000	1986
139492200	62917200	76575000	1987
144523200	61621200	82902000	1988
152998000	60768000	92230000	1989
177922400	74480400	103442000	1990
181630000	77130000	104500000	1991
212023500	96806500	115217000	1992
233692000	97762000	135930000	1993
258139500	102749500	155390000	1994
287040000	106610000	180430000	1995
319502500	120802500	198700000	1996
374869500	164119500	210750000	1997
405783000	187551000	218232000	1998
439656500	217921500	220735000	1999
568921500	317921500	230500000	2000
576705000	332110000	244595000	2001
565542900	319796000	245746900	2002
625794800	343783800	282011040	2003
670505904	355458600	315047304	2004

- (2004– 1970) [illegible]
- (2004) [illegible]
- 2004 – 1970 [illegible]

3-5 [illegible]

[illegible]

1. [illegible]

[illegible]

[illegible]	[illegible]	[illegible]	
13.2	18.4	12.4	[illegible]
13.6	19.9	9.8	[illegible]
13.2	22.6	9.1	[illegible]

2003 [illegible]
(2004[illegible])

[illegible] (2004 [illegible]) [illegible] %5.8) [illegible]

(6) [illegible]

[illegible]

[illegible] 2001			[illegible]
[illegible]	[illegible]	[illegible]	
3.7	4.05	3.6	[illegible]
10.38	12.53	10.8	[illegible]
17.55	17.75	17.45	[illegible]

17.1 25.07 16.1

.2004

(1998

$$\sum_{t=1}^{n}\frac{W_i - C_i}{(1+r)^t} = PVC \qquad - 1$$

= Wi

= Ci

= r

= t

$$\sum_{t=1}^{n}\frac{B_t - C_t}{(1+r)^t}0 = PBV \qquad - 2$$

= Bt

= Ct

= r

[illegible]

[illegible] - 1970 [illegible] 2004 [illegible] (2-3) [illegible] 2004 [illegible] (470500) [illegible] 1970 [illegible] (29900) [illegible]

(7) [illegible]

[illegible]

2004-1970 [illegible]

%	[illegible]	[illegible]	[illegible]
9.96	29900	299900	1970
10.29	32000	310800	1971
10.29	34200	3220000	1972
10.99	36600	332800	1973
11.36	39100	343900	1974
11.78	41900	355400	1975
12.25	45000	367200	1976
12.70	48200	379500	1977
13.20	51800	392200	1978
13.72	55600	405300	1979
14.61	61400	420000	1980
15.50	67500	435400	1981
16.42	74100	451200	1982
17.32	81000	467700	1983
18.20	88300	484700	1984

19.08	95900	502400	1985
19.79	106000	535400	1986
21.00	116800	555700	1987
22.16	126800	572200	1988
23.13	135000	583500	1989
24.10	151900	630100	1990
24.49	158400	646600	1991
25.00	176500	706000	1992
25.57	207000	809300	1993
25.29	240000	948700	1994
25.80	251500	974600	1995
26.49	263400	994000	1996
29.50	304700	1032700	1997
28.89	325400	1126000	1998
29.70	355000	1195000	1999
31.10	375100	1209400	2000
31.99	406098	1269059	2001
32.74	423538	1283450	2002
34.03	440200	1293280	2003
36.18	470500	1300275	2004

- (2004– 1970 [illegible]
- 2004– 1970 [illegible]

[illegible]

[illegible]

4 - [illegible]

[illegible]

4-2

2004-1970

4-3

(Cobb-Douglas)

(Hage, 1988)

$$1. \quad y = A L_t^{B1} \; K_t^{B2} \; Ei_t^{B3} \; Ut$$

$$2. \quad Log\ y_t = Log\ A + B_1\ LogL_t + B_2\ LogKt + B_3\ Log\ Ei + u_t$$

y

L

K

Ei

Ut

$(B_1 \; B_2 \; B_3)$

.Constant A

[illegible] (8) [illegible]

[illegible] 2004-1970.

(8) [illegible]

[illegible]

[illegible] 2004-1970

[illegible] E.H	[illegible]	[illegible]	[illegible]	[illegible]
2167	25.8	29900	235.1	1970
2924	30.7	32000	247.5	1971
3675	36.3	34200	285.7	1972

4552	47.2	36600	316.7	1973
5220	63.2	39100	394.8	1974
6035	87.9	41900	449.5	1975
7461	192.4	45000	589.3	1976
7579	277.9	48200	712.3	1977
9128	263.1	51800	818.5	1978
14087	309.9	55600	1009.7	1979
17512	433.0	61400	1198.7	1980
20688	666.8	67500	1506.2	1981
19977	650.8	74100	1714.2	1982
24912	589.8	81000	1835.8	1983
36049	571.2	88300	1923.3	1984
37234	414.9	95900	1965.8	1985
41714	444.4	106000	2223.2	1986
42342	515.8	116800	2236.5	1987
41340	532.5	126800	2261.0	1988
48597	563.6	135000	2434.0	1989
52033	850.3	151900	2521.3	1990
50118	738.5	158400	2736.9	1991
49141	1208.8	176500	2424.3	1992
43271	1422.8	207000	2735.2	1993
45507	1451.2	240000	4206.9	1994
45706	1554.1	251500	4597.9	1995
48030	1499.3	263400	4799.9	1996
47555	1321.8	304700	5090.1	1997
69927	1224.0	325400	5604.0	1998
74873	1245.3	355000	5758.3	1999
78588	1327.3	375100	6084.6	2000
78033	1318.0	406098	6471.7	2001
90227	1346.7	423538	6698.8	2002
97925	1481.7	440200	7143.3	2003
106976	1570.3	470500	8298.7	2004

- [illegible] (2004- 1970)
- [illegible] (2004- 1970 [illegible])
- ([illegible])

4 - 4 [illegible]

[illegible]

[illegible]

[illegible] (1997 [illegible])

[illegible]

$$\text{Log } y/p = Bo + Bh \text{ Log } Ei + Ut.$$

y/p [illegible].

P : [illegible].

Ei [illegible].

U : [illegible].

Bo : [illegible].

Bh [illegible].

[illegible] (9) [illegible].

جدول رقم (9)

[illegible]

2004-1970 [illegible]

[illegible] E.I	[illegible] Y / p	p [illegible]	Y/L [illegible]	[illegible] L	[illegible] Y	[illegible]
11.5	155.9	1507792	7862.9	29900	235.1	1970
13.2	158.5	4562000	7734.4	32000	247.5	1971

14.2	176.7	1616465	8353.8	34200	285.7	1972
15.2	189.1	1675100	8653.0	36600	316.7	1973
16.9	277.8	1733366	10097.2	39100	394.8	1974
22.8	273.2	1810500	10250.6	41900	429.5	1975
26.2	317.4	1856420	13095.6	45000	589.3	1976
32.3	361.3	1971600	14778.0	48200	712.3	1977
42.4	412.8	1982810	15801.2	51800	818.5	1978
56.1	469.3	2133000	18160.1	55600	1009.7	1979
63.4	577.7	2075089	19522.8	61400	1198.7	1980
85.6	652.9	2307000	22314.1	67500	1506.2	1981
110.8	734.1	2335352	23134.9	74100	1714.3	1982
117.7	735.7	2495300	22664.2	81000	1835.8	1983
120.7	767.6	2561000	21781.4	88300	1923.3	1984
131.5	729.8	2693700	20498.4	95900	1965.8	1985
139.8	819.3	2713615	20973.6	106000	2223.2	1986
139.5	772.1	2896800	19148.1	116800	2236.5	1987
144.5	753.4	3001000	17831.2	126800	2261.0	1988
153.0	782.4	3111000	18029.6	135000	2434.0	1989
177.9	730.2	3453000	16598.4	151900	2521.3	1990
181.6	714.9	3827849	17278.4	158400	2736.9	1991
212.3	604.2	4012500	13735.4	176500	2424.3	1992
233.7	658.8	4152000	13213.5	207000	2735.2	1993
258.1	1003.2	4193400	1752.9	240000	4206.9	1994
287.0	1071.5	4291000	1281.9	251500	4597.9	1995
319.5	1080.3	4441200	18215.3	263400	4797.9	1996
374.9	1106.5	4600000	16705.3	304700	5090.1	1997
408.8	1178.4	4755750	17221.9	325400	5604.0	1998
438.7	1175.2	4900000	16220.7	355000	5758.3	1999
448.4	1226.9	4959111	16221.3	375100	6084.6	2000
476.7	1248.9	5182000	15936.3	406098	6471.7	2001
565.5	1245.1	5380000	15816.3	423538	6698.8	2002
625.8	1303.5	5480000	16227.4	440200	7143.3	2003
670.5	1522.5	5523200	17638.0	470500	8298.7	2004

- (2004- 1970 [illegible]
- ([illegible]
- (2004- 1970 [illegible]
- ([illegible]
- ([illegible]

4- 4 [illegible]

[illegible]

$$\text{Log } y = Bo + Bh \text{ Log } He_t + Ut.$$

y :

He_t : ... 1970-2004.

U :

Bo :

Bh :

1.

$$\text{Log } (y/L) = Bo + Bh \text{ Log } He_t + Ut.$$

Y/L

He :

Bo :

Bh :

.2

$$\text{Log}(y/p) = B_o + B_h \,\text{Log}\, He_t + U_t.$$

Y / p

He

u

h

5-1

$$y = A L_t^{B_1} K_t^{B_2} Ei_t^{B_3} u_t$$

$$\text{Log } y_t = \text{Log } A + B_1 \text{ Log} L_t + B_2 \text{ Log} K_t + B_3 \text{ Log } Ei_t + u_t$$

[illegible]

[illegible] y

[illegible] : L

[illegible] : K

[illegible]

[illegible] B_1 , B_2 , B_3

[illegible]

(10) [illegible]

[illegible]

[illegible] t	F [illegible]	D.W	[illegible]	LogE	LogK	LogL	LogA	[illegible]
0.000	284.172	2.164	0.983	1.121 (2.088)	0.386 (1.851)	1.271 (9.586)	0.525 (0.584)	$Log\ y_t = Log\ A + B_1\ LogL_t + B_2\ LogKt + B_3\ Log\ Ei_{t-4} + u_t$

(t) [illegible]

[illegible] (2) [illegible] (10) [illegible]

[illegible]:

1. (F) [illegible] (0.05 ≥ α) [illegible] (2.164) [illegible] (284.172) [illegible] (t) [illegible] (9.586) [illegible] . (0.05 ≥ α)
2. [illegible] (t) [illegible] (2.088) [illegible] . (0.05 ≥ α)
3. [illegible] (t) [illegible]

[illegible] (1.851) [illegible] ≤ α
. (0.05

[illegible] 4
[illegible] (L) [illegible] (K) [illegible] (Ei) [illegible]
[illegible] (%98.3) [illegible]
. [illegible]

[illegible] (1.271) [illegible]
[illegible] (%1) [illegible]
(1.121) [illegible] (%1.271) [illegible]
[illegible]
. (%1.121) [illegible] (%1) [illegible]

[illegible] (L,K, E) [illegible]
[illegible]

[illegible] (2004 [illegible]) [illegible] (R.M Sallow) [illegible]

[illegible] (odd Aukhrast ,1959) [illegible]

[illegible] %2 [illegible] %1 [illegible]

[illegible] %50.7 [illegible] %1 [illegible]

[illegible] %1.8 [illegible]

[illegible] %26 [illegible]

[illegible] (E.F Denison, 1962) [illegible]

.%23 [illegible]

[illegible] (11) [illegible]

: [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

LogY=BO+BhLogHe+Ut

(11) [illegible]

[illegible]

.[illegible]

[illegible] t	t [illegible]	F [illegible]	D.W	[illegible]	[illegible]	B_1	B_0	[illegible]
0.000	23.27	541.52	1.712	0.978	0.956	0.857	1.498	[illegible]

-: [illegible] (11) [illegible]

1. [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

LogY=BO+BhLogEi+Ut

[illegible] (1) [illegible]

(12) [illegible]

[illegible]

[illegible] t	t [illegible]	F [illegible]	D.W	[illegible]	[illegible]	B_1	B_0	[illegible]
0.000	20.522	421.297	1.687	0.943	0.89	0.94	0.875	[illegible]

[illegible] (12) [illegible]

1. [illegible] (F) [illegible] (0.05 ≥ α)

[illegible] (1.687) [illegible] (421.297) [illegible]

2. [illegible]

[illegible] (20.522) [illegible] (t) [illegible]
.(0.05 ≤ α) [illegible]

3. [illegible] (0.94) [illegible]
[illegible]
[illegible]
[illegible] (%1)
(%0.94) [illegible]

4. [illegible]
[illegible] (%89) [illegible]
[illegible]
[illegible]
[illegible] (%94.3) [illegible]
[illegible]
.[illegible]

[illegible]
[illegible]
(2004 – 1970) [illegible]

: [illegible]

[illegible]
.[illegible]

: [illegible]

Log(Y/P) =BO+BhLogHe+Ut

: [illegible] (1) [illegible]

(13) [illegible]

[illegible]
.[illegible]

[illegible] t	[illegible] t	F [illegible]	D.W	[illegible]	[illegible]	B_1	B_0	[illegible]
0.000	24.281	589.549	1.599	0.973	0.947	0.511	1.744	[illegible]

[illegible] (13) [illegible]

1. [illegible] (F) [illegible] (0.05 ≥ α) [illegible]

[illegible] (589.549) [illegible] (1.599) [illegible].

2. [illegible] (t) [illegible] (24.281) [illegible] (0.05 ≥ α) [illegible].

(0.511) [illegible] (%1) [illegible] (%0.511) [illegible] (%94.7) [illegible] (%97.3) [illegible].

[illegible]

[illegible]

Log (Y/L) =BO+ BhLogHe+Ut: [illegible]

(1) [illegible]

(14) [illegible]

[illegible]

t [illegible]	t [illegible]	F [illegible]	D.W	[illegible]	[illegible]	B_1	B_0	[illegible]
0.389	0.872	0.760	0.876	0.150	0.023	0.076	3.974	[illegible]

[illegible] (14) [illegible]

1. [illegible] (F) [illegible] (0.760) [illegible] (0.05 ≥ α) [illegible] (t) [illegible] (0.872) [illegible] (0.05 ≤ α) [illegible]

[illegible] (1977) [illegible] (Riezen,1977)

2. (1982) [illegible] (2004) [illegible]

5-2

1. 1970 ... 2004–

2.

3.

4.

5.

6.

5-3

1.

2.

3. [illegible]

4. [illegible]

5. [illegible]

6. [illegible]

[illegible] (1992) [illegible]
[illegible] (1990-1981) [illegible]
[illegible]

[illegible] (1964) [illegible]
[illegible]

[illegible] (1995) [illegible]
[illegible]

[illegible] (1989) [illegible]
.24 - 16 .25 [illegible]

[illegible] (1987) [illegible]

[illegible] (1988) [illegible]
[illegible]

2004-1970 [illegible] (2004) [illegible]

.2004-1970 [illegible] (2004) [illegible]

.2004-1978 [illegible] (2004) [illegible]

-1965 [illegible] (2003) [illegible]
.2003

ب- المراجع الأجنبية

Backer S. Gary, and K.M Murphy (1990). "Human capital, fertility and Economic Growth" **Journal of political Economy**, Vol. 98 N 5, PP. 512-514.

Barro and Wha Lee (1994) .Losers and Winners in Economic Growth. The intentional Bank for Reconstruction and Bank Development .

Cohn Elchnan (1995). The Economics of Education2 ,Penguin Books: P17.

Delano Villanueva .(1994).Opemess, Human Development IMF staff paper Vol 41 No 1 1994.

Denison. E.F (1962) The Source Of Economic growth in the united states and alternatives before us ,supplementary paper No13,(New York :committee for Economic Development .

Delwin A. Roy and Williant . **Irelan Educational Policy and Hyman Recourse Development in Jordan**.

Dore, (1976). "Human Capital theory" The diversity societies and the problem of quality in Education" **Higher Education**. Vol (5). N(1). P 79-102.

Ichiro otaniand ,Delano Villanueva (1989) Theoretical aspect of growth in developing countries . IMF staff paper, Jun vol.36 n2 intentional Monetary fund UN World Bank .

Jerald Hage ,Mauric A . Garnier ,Bruce Fuller (1988) The Active State investment in Human capital and Economic Growth :France 1925-1975. **American Sociological Review** vol .53.

Lin Chein and Michael Armer. (1993). "Education Effect on Economic in Taiwan" **Comparative Education Review**. Vol. 37, No.3, P. 309.

Lucas, Robert (1998) .On the Mechanics of Economic Development **.Journal of Monetary Economic** vol 22 :pp3 –42 .

Todaro. (1994). "**Economic Development**" Fifth Edition, New York University. London new York .

Macchlup Fritz (1982), Issues in the theory of Human Capital Education as Investment . The Pakistan Development vol. 22 pp3-42.

Martin W. Schoppmeyer (1992).The Economics of Education. University of Arkansas ,Fayetteville Turdy Knox Publisher Granvll,p22.

McMahom (1987) The Relation of Education and R&D to Productivity Growth in developing Countries of Africa. Comparative of Education Review vol 6 N2 pp183 - 194.

Meyer W. John (1977) . The Effect of Education of an institution . American Journal of Sociology v83 N1 pp55 - 76.

Psacharopoulos, George, (1973) **Returns to Education, An International Comparison Higher Education Research Unit**, School of Economics and Political Science, London,

Schultz. W. Theodore (1971) "**Education and Economic Growth**" UNESCO Paris.

[illegible]

[illegible]

2004-1970 [illegible]

[illegible]

2004-1970 [illegible]

[illegible]	[illegible] E.H	[illegible] H.E	[illegible] Y / P	[illegible] P	[illegible] Y/L	[illegible] L	[illegible] Y	[illegible]
25.8	2167	11.5	155.9	1507792	7862.9	29900	235.1	1970
30.7	2924	13.2	158.5	4562000	7734.4	32000	247.5	1971
36.3	3675	14.2	176.7	1616465	8353.8	34200	285.7	1972
47.2	4552	15.2	189.1	1675100	8653.0	36600	316.7	1973
63.2	5220	16.9	277.8	1733366	10097.2	39100	394.8	1974
87.9	6035	22.8	273.2	1810500	10250.6	41900	429.5	1975
192.4	7461	26.2	317.4	1856420	13095.6	45000	589.3	1976
277.9	7579	32.3	361.3	1971600	14778.0	48200	712.3	1977
263.1	9128	42.4	412.8	1982810	15801.2	51800	818.5	1978
309.9	14087	56.1	469.3	2133000	18160.1	55600	1009.7	1979
433.0	17512	63.4	577.7	2075089	19522.8	61400	1198.7	1980
666.8	20688	85.6	652.9	2307000	22314.1	67500	1506.2	1981
650.8	19977	110.8	734.1	2335352	23134.9	74100	1714.3	1982
589.8	24912	117.7	735.7	2495300	22664.2	81000	1835.8	1983
571.2	36049	120.7	767.6	2561000	21781.4	88300	1923.3	1984
414.9	37234	131.5	729.8	2693700	20498.4	95900	1965.8	1985
444.4	41714	139.8	819.3	2713615	20973.6	106000	2223.2	1986
515.8	42342	139.5	772.1	2896800	19148.1	116800	2236.5	1987
532.5	41340	144.5	753.4	3001000	17831.2	126800	2261.0	1988
563.6	48597	153.0	782.4	3111000	18029.6	135000	2434.0	1989
850.3	52033	177.9	730.2	3453000	16598.4	151900	2521.3	1990
738.5	50118	181.6	714.9	3827849	17278.4	158400	2736.9	1991
1208.8	49141	212.3	604.2	4012500	13735.4	176500	2424.3	1992
1422.8	43271	233.7	658.8	4152000	13213.5	207000	2735.2	1993
1451.2	45507	258.1	1003.2	4193400	1752.9	240000	4206.9	1994
1554.1	45706	287.0	1071.5	4291000	1281.9	251500	4597.9	1995
1499.3	48030	319.5	1080.3	4441200	18215.3	263400	4797.9	1996
1321.8	47555	374.9	1106.5	4600000	16705.3	304700	5090.1	1997
1224.0	69927	408.8	1178.4	4755750	17221.9	325400	5604.0	1998
1245.3	74873	438.7	1175.2	4900000	16220.7	355000	5758.3	1999
1327.3	78588	448.4	1226.9	4959111	16221.3	375100	6084.6	2000
1318.0	78033	476.7	1248.9	5182000	15936.3	406098	6471.7	2001

1346.7	90227	565.5	1245.1	5380000	15816.3	423538	6698.8	2002
1481.7	97925	625.8	1303.5	5480000	16227.4	440200	7143.3	2003
1570.3	106976	670.5	1522.5	5523200	17638.0	470500	8298.7	2004

- (2004- 1970 [illegible]
- ([illegible]
- (2004- 1970 [illegible]
- ([illegible]
- ([illegible]